

**REMARKS**

This response is filed in response to a Final Office Action mailed February 3, 2009, from the United States Patent and Trademark Office in connection with the above identified application.

Applicant has carefully studied the outstanding Office Action. The present response is intended to be fully responsive to all points of rejection raised by the Examiner.

Applicant thanks the Examiner for examination of the previously presented claims. By this amendment, Applicant amends Claims 1, 7, 8, 9, 12 and 13.

No new matter is introduced. Accordingly, Claims 1-9 and 12-13 will remain pending in the application upon entry of this amendment.

Reconsideration of the rejections is respectfully requested.

**Specification**

Claims 1 and 7 are objected to as failing to provide proper antecedent basis for the claimed subject matter. Applicant respectfully traverses this rejection in view of the remarks presented below with regard to the rejection under 35 USC 112, first paragraph.

**Claim Rejections – under 35 USC §101**

Claims 7-9 and 13 stand rejected under 35 U.S.C 101 as being directed to non-statutory subject matter. Applicant respectfully traverses this rejection in view of the remarks that follow.

According to the Office Action, claims 7-9 and 13 are “*directed merely to arrangements of data, although stored on a compact disc. Specifically, independent Claim 7 does not recite any structure for the disc, but only discloses audio data samples and associated data symbols, at least one of which is erroneous, and that there are error correction codewords associated with the data symbols. This only requires an arrangement of data. Although there is recitation of a “non-standard codeword”, there is no indication in the claim or specification that this arrangement is anything other than a further arrangement of data on the disc. An arrangement of data is non-functional descriptive material, which is not statutory subject matter even if stored on a computer-readable medium.*”

Claims 7-9 and 13 have been amended.

Claim 7 (as amended) is directed to a compact disc having copy-protection. The disc comprises, "at least one uncorrectable erroneous data symbol produced when mastering the copy-protected compact disc" The disc further comprises error-correction codewords, each of which comprises "a plurality of altered parity symbols rendering said erroneous data symbol uncorrectable" (*emphasis added*).

Altering the polarity symbols in the codewords associated with the data symbol so that the data symbol is uncorrectable means that the resulting codeword becomes a "non-standard" codeword. As is known in the art, codewords are represented by physical pit and land patterns. The physical pit and land patterns of a "non-standard" codeword are different from the physical pit and land patterns produced on a disc which conforms to the IEC-908 standard.

The physical pit and lands of the non-standard codeword, which is encoded at the time of mastering the disc, clearly forms a part of the structure of the disc and is not merely an "arrangement of data".

In the "Response to Arguments", the Office Action maintains that *"there appears to be no description of in the specification of what such a claimed 'non-standard codeword' would encompass, nor does there appear to be any mention of pit and land patterns, either standard or non-standard. The fact that a particular data encoding is used does not necessarily imply that there is any physical or functional relation between the structure of the disc and the particular data encoded. Therefore, the claims still appear to be directed solely to arrangements of data on the claimed compact disc."*

Applicant respectfully refers the Examiner to the Specification and figures, especially the "Background of the Invention" which describes compact discs conforming to international standards – IEC 908 (known as the "Red Book"). Reference is also made to several other publications and standards and it is well known in the art that data on a compact disc is represented by physical pit and lands.

Furthermore, Applicant respectfully refers the Examiner to the recent decision (*In re Bilski*, F.3d (Fed. Cir. 2008) (*en banc*)), where, the Court of Appeals for the Federal Circuit applied the "machine-or-transformation test" as the only test to be used in determining whether a

claimed process is eligible for patenting under § 101. The decision holds that a claimed process either (1) be tied to a particular machine or apparatus or (2) transform a particular article into a different state or thing.

Thus, since the claims relate to a compact disc, Applicant respectfully submits that the claimed invention is directed to statutory subject matter.

Applicant respectfully submits that claim 7 is directed to statutory matter and conforms to 35 U.S.C 101. Claims 8-9 and 13, which depends from claim 7 similarly conform to 35 U.S.C 101.

### **Claim Rejections – under 35 USC § 112**

Claims 1-9 and 12-13 are rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement.

The language of claims 1, 7-9, 12 and 13 have been amended to further clarify and distinctly claim the subject matter in order to overcome the §112 rejection.

The Office Action asserted that “there does not appear to be sufficient written description to support the use of the term ‘*at the time of mastering*’ in the application”. Applicant respectfully refers the Examiner to Fig.19 and description thereof where the system for copy protection is described. The application is entitled “COPY-PROTECTED DIGITAL AUDIO COMPACT DISC, AND METHOD AND SYSTEM FOR PRODUCING SAME”, and all the steps described in the specification are performed as part of the mastering process. No new subject matter is being claimed.

With regard to the phrase “at least one uncorrectable erroneous data symbol”, Applicant respectfully refers the Examiner to the section of the Specification headed “Disabling Error Correction” where disabling error correction for erroneous values is described.

Claims 1-9 and 12-13 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claims 1, 7-9, 12 and 13 have been amended to further clarify and distinctly claim the subject matter in order to overcome the §112 rejection.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the section 112 rejections of claims 1-9 and 12-13.

### **Claim Rejections – under 35 USC § 102**

Claims 1-9, 12 and 13 are rejected under 35 USC 102 (b) as being anticipated by Siquin et al. (US Patent 6,425,098). Applicants respectfully traverse this rejection in view of the remarks that follow.

Claims 1, 7-9, 12 and 13 have been amended.

The Office Action cites Siquin et al. as anticipating claims 1-9, 12 and 13.

Siquin et al. describes a method for protecting data which introduces intentionally erroneous data values and generating error correcting codes as though all values (including the erroneous data values) are correct.

Applicant respectfully submits that the present invention is inherently different from and is not anticipated by Siquin et al. (US Patent 6,425,098). For example, column 8, lines 11-28 of Siquin, which describes the processing of the audio input, states, *inter alia*, “*The EFM stream is passed to an error generator 66, which alters certain of the data segments, such as segment 26 or 34, without changing the corresponding CIRC values in segments 32 and 36.*” (*emphasis added*)

Independent claim 1 of the present invention discloses a method for producing a copy-protected audio compact disc, containing audio data samples of an audio signal which *inter alia*, includes the step of “*disabling the error-correction of the error-correction codewords associated with the data symbols by altering at least one of a plurality of parity symbols in the codewords associated with the data symbols, thereby rendering said erroneous symbols uncorrectable.*” (*emphasis added*)

Independent claim 7 discloses a copy-protected audio compact disc, encoded at the time of mastering with at least one non-standard codeword, which comprises, *inter alia*, “*at least one uncorrectable erroneous parity symbol produced when mastering the original disc.*” (*emphasis added*)

Furthermore, the Office Action refers to Siquin (column 10, line 60 –column 11, line 33) as disclosing “disabling the error-correction of *the erroneous symbols* which includes altering at least one of a plurality of parity symbols in the codewords associated with said data symbols”.

Column 11, lines 20-33, which describes code generation prior to recording stored data on CD 98 states:

*“Prior to recording the stored data on CD 98 in standard audio CD format, new error correcting codes (CIRC) must be generated by CD drive 96. In this stage of code generation, there is no indication that data values such as value 78 are erroneous, and the corresponding codes are generated as though all data values were correct. The data (including the intentional errors and corresponding “correct” error codes) are re-encoded in fourteen-bit format and written to CD 98. Since the error correcting codes in the frame containing data value 78 now indicate that there is nothing wrong with this value, processor 40 (FIG. 2) will not flag the value as erroneous and will do nothing to conceal it. The playback of the unauthorized copy will therefore contain severe and unrecoverable audio distortions.”*

Thus, in contrast to claim 1, which discloses “*disabling the error-correction of the error-correction codewords associated with the data symbols*”, Siquin *enables* the error correction to “generate new error correcting codes (CIRC)”.

Thus, since Siquin categorically does not change the CIRC values, Applicants respectfully submit that Siquin teaches away from the present invention and cannot anticipate the present invention.

Applicants respectfully submit that Siquin et al. does not disclose or suggest the features of independent claims 1 and 7. Specifically, Siquin et al. does not describe or disclose the limitations of claim 1; “*at the time of mastering the copy-protected audio compact disc, disabling the error-correction of the error-correction codewords associated with said data symbols, said step of disabling comprising the step of altering at least one of a plurality of parity symbols in the codewords associated with said data symbols*”. Similarly, Siquin et al. does not describe or disclose the limitation of claim 7; “*A copy-protected audio compact disc,*

*encoded at the time of mastering the original disc with at least one non-standard codeword".*  
(*emphasis added*)

Thus, Applicants respectfully submit that the method for protecting data by Sinquin et al. cannot anticipate Applicants' amended claims 1 and 7. Since claims 2-6 and 12 depend from claim 1 and claims 8-9 and 13 depend from claim 7, they are not anticipated by Sinquin et al. for at least the same reasons discussed above in relation to claims 1 and 7. Therefore, Applicants respectfully submit that the rejection of claims 1-9, 12 and 13 has been overcome with this amendment.

Furthermore, the dependent claims of the present application disclose additional novel features. For example, claim 12 (as amended) discloses a method of disabling the error-correction of the error-correction codewords and claim 13 (as amended) discloses a compact disc having non-standard codewords. In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the rejections to claims 1-9 and 12-13.

#### CONCLUSION

Accordingly, Applicant respectfully submits that the claims, namely claims 1-9 and 12-13 are in condition for allowance, for which early allowance is earnestly solicited. Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below.

Respectfully submitted,

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Dated: March 23, 2009

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